

U.S.S.N. 10/696,636
Amdt. dated March 3, 2006
Reply to Office Action of Dec. 28, 2005

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Atty. Dkt. No. 77016

REMARKS/ARGUMENTS

In the specification, the paragraph beginning at page 1, line 3 has been amended to update status information for a listed priority application.

Claims 1-23 remain in this application. Claims 24-32 have been canceled. Claim 2 has been withdrawn as directed to a non-elected species.

In view of the Examiner's earlier restriction requirement, Applicants retain the right to present non-elected claims 24-32, or other claims directed to the non-elected invention, in a divisional application.

Claims 1, 16, and 17 have been amended. Claim 1, clause (a), has been amended to clarify that a dairy-derived whey protein material is being processed using the inventive method. Claim 1, clause (b), has been amended to recite adjusting of the aqueous composition to either (1) a basic pH in the range of about 8.5 to about 12 using addition of alkali to the aqueous composition, or (2) an acidic pH in the range of about 2.5 to about 4 using addition of acid to the aqueous composition. Support for these amendments to claim 1 is identified below in connection with Applicants' discussions of the rejections made in the Office Action. Reference is made thereto. Also, as an editorial revision, clause "(e)" in claim 1 has been renumbered as clause -- (d) -- for sake of clarity in the recited sequence of steps. In claims 16 and 17, a minor editorial correction has been made. No new matter has been introduced.

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Reply to Rejection under 35 U.S.C. § 112, Second Paragraph

Claims 1 and 3-23 have been rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

At page 2 of the Office Action, it states:

In claim 1, it is not clear as to what is encompassed by the term "whey". In other words, does this term only consider cow milk derived components or does this also refer to whey derived from, for example, in processing soy milk products. For example, Lawhon et al (U.S. Patent No. 4332719) refers to oilseed related extract as whey (see Abstract).

In response, Applicants have amended claim 1, clause (a), to clarify that the "whey" is "dairy-derived whey protein material". This amendment clearly distinguishes soy protein materials.

The term "whey" has an ordinary meaning in the art in that it is the liquid substance obtained by separating the coagulum from dairy milk, dairy cream or skim milk, and the like, in cheese making. It is also known that the protein content of the whey can be concentrated in known manners to provide other whey protein materials such as whey protein concentrates and isolates, and so forth. The present specification refers to such examples of dairy-derived sources of whey protein (page 12, lines 4-6).

The present specification explains that the inventive method for deflavoring whey proteins also allows for removal of lactose, in addition to removal of off-flavors (page 4, line 26 to page 5, line 18; and page 7, lines 4-7). As known, lactose, which also is commonly referred to as "milk sugar," is the carbohydrate normally obtained from whey. Soy beans are naturally void of

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lactose. Example 1 of the present specification refers to a commercial whey protein concentrate obtained from Leprino Co. ("WPC34") which had "lactose, milky and animal flavors as normally associated with whey proteins," as detected in untreated control samples thereof (see Example 1, pages 18-19). As indicated in the example, these attributes were essentially eliminated in samples treated by the inventive method. Moreover, Example 3 (page 19) in the present specification refers to "sweet whey," which is "also known as rennet whey or cheese whey." The term "sweet whey" has an ordinary meaning in the art in reference to whey obtained from a procedure in which there is insignificant conversion of the original lactose content of the whey to lactic acid. Again, soy beans have no natural lactose content. Also, "rennet" is a well-known milk-clotting enzyme, and not a soy-curdling agent.

The references to lactose, milk, cheese making, rennet, and the like, in the instant specification in connection with the whey terminology shows that a *dairy-derived* material, not a soy-derived material, is contemplated and recited in present claim 1.

Applicants also submit that the reference in the Office Action to Lawhon's 4,332,719 patent is not controlling on the meaning of the term "whey" as that term is ordinarily defined in this art or used in the instant application. Lawhon, apparently, decided to be his own lexicographer regarding what "whey" meant for the limited purposes of his particular patent, which he is entitled to do to some extent, albeit, in Applicants' view, by applying a meaning that is inconsistent with usual and customary usage of the term in question.

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In view of the above, amended claim 1 is sufficiently clear and definite to one of ordinary skill in the art.

Therefore, for at least these above reasons, Applicants request reconsideration and withdrawal of the indefiniteness rejection of Claims 1 and 3-23.

Claim Rejections for Obviousness-Type Double Patenting

1. Claims 1 and 3-23 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending application No. 11/209105; claims 1 and 3-8 of copending application No. 10/755210; claims 1-22 of copending application No. 10/655259; claims 12-22 and 24 of copending application No. 10/655478; claims 11-20 of copending application No. 10/696284; and claims 1-23 of copending application No. 10/941578.

The Examiner's rationale of these rejections have been fully carefully reviewed.

Regarding the provisional obviousness-type double patenting rejection based on copending application No. 11/209105, Applicants note that this copending application sets forth claim recitations referencing, *inter alia*, a method of deflavoring whey protein with membrane electrodialysis to adjust a whey protein composition to a basic pH in the range of 8.0 to about 12.

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To further distinguish the claims of copending application No. 11/209105, instant claim 1, clause (b), has been amended to clarify that pH adjustment occurs "using addition of alkali to the aqueous composition", which is supported, e.g., at page 5, line 30 to page 6, line 5, or "using addition of acid to the aqueous composition", which is supported, e.g., at page 6, lines 6-15.

Applicants respectfully submit that pH adjustment provided via addition of alkali or acid, as in the present amended claims, is not identical with or obvious over pH adjustment via membrane electrodialysis per copending application 11/209105, and vice versa.

Therefore, instant claims 1 and 3-23 are not obvious over claims 1-21 of copending application No. 11/209105.

Also, to the extent the generic claim 1 is found to be allowable, Applicants request rejoinder of claim coverage directed to the non-elected species (i.e., basic pH treatment: claim 1, clause (b)(1), and claim 2).

Regarding the provisional obviousness-type double patenting rejections based on the cited claims of the other listed copending application nos. 10/755210, 10/655259, 10/655478, 10/696284, and 10/941578 under this obviousness-type double patenting rejection, Applicants point out that they each relate to deflavoring soy materials.

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The Office Action is understood to take the position that the co-pending applications 10/755210, 10/941578 and 10/655259, are relevant because "soy-derived protein material" is "within the scope of the generic 'whey' term of the instant claims" (Office Action, page 4). Presumably, this rationale also is being applied relative to copending applications 10/655478 and 10/696284, which also have their soy protein features discussed in the Office Action (pages 3-4). Clarification is requested if this understanding is mistaken.

In response to these rejections, Applicants again note that they have amended claim 1 to clarify that the method involves, among other things, "...preparing an aqueous composition comprising a dairy-derived whey protein material", and the "dairy-derived" terminology implicitly means something different than soy protein-derived.

Also, 10/941578 also concerns *electrodialysis* treatment to provide a basic pH in the soy composition, and not pH adjustment via alkali or acid addition. This represents an additional distinction between the claims of that copending application and the present claims under examination.

In view of at least these reasons, Applicants submit that the provisional obviousness-type double-patenting rejections based on the copending applications are not applicable against the present claims, and, therefore, these rejections should be withdrawn.

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2. Claims 1 and 3-23 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Pat. No. 6787173.

The Office Action is understood to take the position that the claims of U.S. Pat. No. 6787173 "... are further limited to soy-derived protein material (which is within the scope of the generic 'whey' term of the instant claims" (Office Action, page 4).

Applicants submit that this grounds of rejection is not applicable to amended claim 1 for the same reasons indicated above with reference to the provisional rejections based on the copending applications. Namely, amended claim 1 recites that the method involves "...preparing an aqueous composition comprising a dairy-derived whey protein material." Clearly, soy-derived material is not encompassed by dairy-derived whey protein material.

In view of at least these reasons, Applicants submit that the provisional obviousness-type double-patenting rejection based on U.S. Pat. No. 6787173 is not applicable against the present claims, and, therefore, this rejection should be withdrawn.

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CONCLUSION

In view of the above, it is believed that this application is in condition for allowance, and notice of such is respectfully requested.

Respectfully submitted,

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